Claims

We claim:

1.   A method for dynamically determining a transmission sequence of FGS encoded video images composed of a plurality of macroblocks distributed among a plurality of bit-planes to allow for selective enhancement of desired portions of said video image, said transmission sequence being predetermined, said method comprising the steps of:

determining at least one of said FGS encoded macroblocks in each of said bit-planes associated with said desired portion of said video image;

determining an order of transmission of each of said determined at least one of said FGS encoded macroblocks with said transmission sequence; and

advancing each of said at least one of said determined FGS encoded macroblocks in said transmission sequence order corresponding to a known level of enhancement, wherein said advanced FGS encoded macroblocks are contained in a bit-plane having a higher transmission priority.

2.   The method as recited in claim 1 further comprising the step of:

filling said transmission sequence with a known value to maintain said transmission sequence order.

3.   The method as recited in claim 2 wherein said known value is representative of a not significant value.

4.   The method as recited in claim 1 further comprising the step of:

determining said desired portion from a user request.

5.   The method as recited in claim 1 further comprising the step of:

determining said known enhancement level from a user request.

6. The method as recited in claim 1 further comprising the step of:

determining said desired portion in accordance with known factors.

7. The method as recited in claim 6 wherein said known factors are selected from the group comprising: center of image, faces, moving images, etc.

8. The method as recited in claim 1 wherein further comprising the step of:

determining said enhancement factor in accordance with an available network bandwidth.

9. The method as recited in claim 1 wherein said predetermined transmission sequence is selected from the group comprising: horizontal, vertical, diagonal, raster, progressive, interlaced scans.

10. The method as recited in claim 1 further comprising the step of:

determining said transmission sequence order from said transmission sequence.

11. A device for dynamically determining a transmission sequence of FGS encoded video images composed of a plurality of macroblocks distributed among a plurality of bit-planes to allow for selective enhancement of desired portions of said video image, said transmission sequence being predetermined, said device comprising:

means for determining at least one of said FGS encoded macroblocks in each of said bit-planes associated with said desired portion of said video image;

means for determining an order of transmission of each of said determined at least one of said FGS encoded macroblocks with said transmission sequence; and

    means for advancing each of said at least one of said determined FGS encoded macroblocks in said transmission sequence order corresponding to a known level of enhancement, said advanced FGS encoded macroblocks are contained in a bit-plane having a higher transmission priority.

12.   The device as recited in claim 11 further comprising:

    means for filling said transmission sequence with a known value to maintain said transmission sequence order.

13.   The device as recited in claim 12 wherein said known value is representative of a not significant value.

14.   The device as recited in claim 11 further comprising:

    means for determining said desired portion from a user request.

15.   The device as recited in claim 11 further comprising:

    means for determining said known enhancement level from a user request.

16.   The device as recited in claim 11 further comprising:

    means for determining said desired portion in accordance with known factors.

17.   The device as recited in claim 16 wherein said known factors are selected from the group comprising: center of image, faces, moving images, etc.

18.   The device as recited in claim 11 wherein further comprising:

means for determining said enhancement factor in accordance with an available network bandwidth.

19. The device as recited in claim 11 wherein said predetermined transmission sequence is selected from the group comprising: horizontal, vertical, diagonal, raster, progressive, interlaced scans.

20. The device as recited in claim 19 further comprising:

means for determining said transmission sequence order from said transmission sequence.

21. A system for dynamically determining a transmission sequence of FGS encoded video images composed of a plurality of macroblocks distributed among a plurality of bit-planes to allow for selective enhancement of desired portions of said video image, said transmission sequence being predetermined, said system comprising:

a memory including

code for determining at least one of said FGS encoded macroblocks in each of said bit-planes associated with said desired portion of said video image;

code for determining an order of transmission of each of said determined at least one of said FGS encoded macroblocks with said transmission sequence; and

code for advancing each of said at least one of said determined FGS encoded macroblocks in said transmission sequence order corresponding to a known level of enhancement, said advanced FGS

encoded macroblocks are contained in a bit-plane having a higher

transmission priority; and

a processor in communication with said memory, said processor operable

to execute said code.

22. The system as recited in claim 21 wherein said memory further includes:

code for filling said transmission sequence with a known value to maintain

said transmission sequence order.

23. The system as recited in claim 22 wherein said known value is representative of a

not significant value.

24. The system as recited in claim 21 wherein said memory further includes:

code for determining said desired portion from a user request.

25. The system as recited in claim 21 wherein said memory further includes:

code for determining said known enhancement level from a user request.

26. The system as recited in claim 21 wherein said memory further includes:

code for determining said desired portion in accordance with known

factors.

27. The system as recited in claim 26 wherein said known factors are selected from

the group comprising: center of image, faces, moving images, etc.

28. The system as recited in claim 21 wherein said memory further includes:

code for determining said enhancement factor in accordance with an

available network bandwidth.

29. The system as recited in claim 21 wherein said predetermined transmission

sequence is selected from the group comprising: horizontal, vertical, diagonal,

raster, progressive, interlaced scans.

30. The system as recited in claim 29 wherein said memory further includes:

code for determining said transmission sequence order from said

transmission sequence.

31. The system as recited in claim 21 further comprising:

an input/output device in communication with said processor.

32. The system as recited in claim 31 wherein said input/output device is operable to

receive or transmit information over a network.

33. The system as recited in claim 32 wherein said network is selected from the group

comprising: POTS, Internet, LAN, WAN, Intranet.

34. The system as recited in claim 32 wherein said user requests are received over

said network.